



REMARKS

The Office Action dated September 27, 2006 has been received and carefully noted. The above amendments to the claims and the following remarks are submitted as a full and complete response thereto.

Claims 17, 18, 23, 26-33, 35-37, 39, and 40, are amended to more particularly point out and distinctly claim the subject matter of the present invention, claims 24 and 25 are cancelled without prejudice or disclaimer, and new claims 41-43 are added. Support for the amendments is found at least on page 10 lines 17-24 of the present specification. Support for the new claim 43 is found at least on page 20 lines 26-30. Support for the amendment of claim 36 and new claims 41 and 42 is found at least on page 10 lines 17-24 of the specification. No new matter is added. Claims 27-33 and 35-43 are respectfully submitted for consideration.

The Office Action rejected claims 17-33 and 35-40 under 35 U.S.C. 102(a) as being anticipated by the publication "Digital Cellular Telecommunications Systems; General Packet Radio Service (GPRS), GPRS Tunnelling Protocol (GTP) across the Gn and Gp Interface; (hereinafter GSM). Applicant respectfully submit that GSM fails to disclose or suggest all of the features of any of the pending claims.

Claim 17, from which claims 18-22, 37 and 38, depend is directed to a method for restoring a subscriber context in a mobile communication network. Restart information is stored for a serving GPRS support node (SGSN) at a gateway GPRS support node (GGSN). The restart information indicates whether the SGSN has been restarted. A

packet data protocol (PDP) context message is received at the GGSN from the SGSN. The PDP context message includes restart information indicating whether the SGSN has been restarted. A response is created to the PDP context message at the GGSN and transmitted to the SGSN from the GGSN. The restart information of the received PDP context message is compared with the stored restart information stored for the SGSN at the GGSN. All subscriber contexts which are stored in the GGSN are inactivated for use of the SGSN and have been updated before the latest restart of the SGSN when the restart information of the message received in the receiving step differs from the restart information stored for the SGSN.

Claim 26, from which claims 27-30 depend is directed to a system for restoring a subscriber context in a network element of a communication. A storing unit is configured to store restart information for a serving GPRS support node (SGSN) at a gateway GPRS support node (GGSN) the restart information indicating whether the SGSN has been restarted. A receiving unit is configured to receive a packet data protocol (PDP) context message at the GGSN from the SGSN, the PDP context message including restart information indicating whether the SGSN has been restarted. A control unit is configured to inactivate all subscriber contexts which are stored in the GGSN related to the SGSN and have been updated before said latest restart, in response to said restart information. A transmitting unit is configured to transmit a response message from the GGSN to the SGSN. A restart counter is configured to count a restart number. An adding unit is configured to add said restart number to a subscriber context message. The

communication network includes at least the SGSN and the GGSN, the GGSN storing a plurality of subscriber contexts related to the SGSN.

Claim 31, from which claims 32, 33, 35-38 and 43 depend, is directed to a serving GPRS support node (SGSN) for a mobile communication network. A transmitting unit is configured to transmit a packet data protocol (PDP) context message from the SGSN to a gateway GPRS support node (GGSN), the PDP context message including restart information. The restart information indicates whether the SGSN has been restarted. A receiving unit is configured to receive a PDP context message from the GGSN, the PDP context message includes restart information which indicates whether the GGSN has been restarted. A control unit is configured to inactivate all subscriber contexts stored in the SGSN for the GGSN and is updated before the latest restart, when the restart information of the message received from the GGSN differs from the restart information stored for the GGSN.

Claim 39 is directed to a method for restoring a subscriber context in a mobile communication network. A serving GPRS support node (SGSN) stores restart information for a gateway GPRS support node (GGSN) indicating whether the GGSN has been restarted. A packet data protocol (PDP) context message is received from the GGSN at the SGSN, wherein the PDP context message includes restart information. At the SGSN, the restart information of the PDP context message is compared with the restart information stored for the GGSN. All subscriber contexts are inactivated that are stored in the SGSN for use of the GGSN except those subscriber contexts for use of the

GGSN that have been updated after the latest restart of the GGSN when the restart information of the message received in PDP context message differs from the restart information stored for the GGSN. The mobile communication network includes at least the SGSN and the GGSN, the SGSN storing a plurality of subscriber contexts for use of the GGSN, and the GGSN storing a plurality of subscriber contexts for use of the SGSN.

Claim 40 is directed to a Gateway GPRS Support Node (GGSN), for a mobile communication network. A transmitting unit is configured to transmit a packet data protocol (PDP) context message from the GGSN to a serving GPRS support node (SGSN), the PDP context message including restart information, the restart information indicating whether the GGSN has been restarted. A receiving unit is configured to receive a PDP context message from the SGSN, the PDP context message including restart information, the restart information indicating whether the SGSN has been restarted. A control unit is configured to inactivate all subscriber contexts which are stored in the GGSN for the SGSN and have been updated before the latest restart of the SGSN when the restart information of the message received in the receiving step differs from the restart information stored for the SGSN. Use of a received subscriber context created or updated is continued after said latest restart.

Applicants respectfully submit each of the pending claims recite features that are neither disclosed nor suggested by GSM.

GSM defines the GPRS Tunnelling Protocol (GTP), i.e., the protocol between GSN nodes in the GPRS backbone network. The protocol includes both the GTP

signaling and data transfer procedures. GSM discloses an “Echo Request” to find out if another GSN is alive. (See section 7.4.1 of GSM). An “Echo Response” is sent as a response to a received Echo Request which includes a Restart Counter value received in the Echo Response. The message can be sent from one GSN to another GSN. The Restart Counter value received by the GSN is compared to the Restart Counter value stored for the peer GSN. (See section 7.4.2 of GSM).

Applicant respectfully submits that GSM fails to disclose or suggest the feature of receiving a packet data protocol (PDP) context message at the GGSN from the SGSN, the PDP context message including restart information indicating whether the SGSN has been restarted, as recited in claim 17 and similarly recited in claims 26, 31, 39 and 40. As discussed above, GSM merely discloses an Echo Request, which does not contain restart information. The Echo Request merely “pings” the peer GSN to see if it is alive. The Restart Counter Value is returned in the Echo Response.

Further, Applicant respectfully submits that GSM fails to disclose or suggest at least the feature of receiving a packet data protocol (PDP) context message at the GGSN from the SGSN, the PDP context message including restart information indicating whether the SGSN has been restarted, as recited in claim 17 and similarly recited in claims 26, 31, 39 and 40. GSM does not appear to mention, disclose or suggest that any information regarding PDP context is transmitted in either of the Echo Request or Echo Response messages.

Applicant respectfully submits that because claims 18-25, 27-30, 32, 33, 35-38 depend from claims 17, 26 and 31, these claims are allowable at least for the same reasons as claims 17, 26 and 31, as well as for the additional features recited in these dependent claims.

Based at least on the above, Applicant respectfully submits that GSM fails to disclose or suggest all of the features of claims 17-33 and 35-40. Accordingly, withdrawal of the rejection of claims 17-33 and 35-40 under 35 U.S.C. 102(a) is respectfully requested.


As stated above, new claims 41-43 are added and fully supported in the specification. Applicant respectfully submits that because claims 41-43 depend from claims 31 and 40, claims 41-43 are allowable at least for the same reasons as claims 31 and 40, as well as for the additional features recited in these dependent claims.

Applicant respectfully submits that each of claims 17-33 and 35-43 recite features that are neither disclosed nor suggested in GSM. Accordingly, it is respectfully requested that each of claims be allowed and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Additional Claim Fee Transmittal
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